



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

**REGION IX LABORATORY
1337 S. 46TH STREET
BLDG. 201
RICHMOND, CA 94804-4698**

FEB 11 2000

MEMORANDUM

SUBJECT: Case R00S16, SDG 00005B
Results for Perchlorate and Total Dissolved Solids Analysis

FROM: *for* Brenda Bettencourt, Director *B. Bettencourt*
EPA Region 9 Laboratory (PMD-2)

TO: Kevin Mayer, Remedial Project Manager
Northern California Cleanup Section (SFD-7-2)

Attached are the report narrative and results spreadsheet from analysis of samples from the Colorado River Perchlorate Study. These data have been reviewed in accordance with EPA Region 9 Laboratory policy. Summary information for the data included in this report is as follows:

SITE/PROJECT:	Colorado River Perchlorate Study
CASE:	R00S16
LABORATORY:	U. S. EPA Region 9 Laboratory
SAMPLE DELIVERY GROUP(s):	00005B
ANALYSIS:	Perchlorate (R9 Lab SOP 531) Total Dissolved Solids (EPA method 160.1)

A full documentation package for these data, including raw data and sample custody documentation, has been prepared and is filed at the Region 9 Laboratory. Please contact Vance Fong of the Quality Assurance Program (PMD-3) to request review and/or validation of the data.

If you have any questions please contact Rich Bauer at (510) 412-2312, or Ken Hendrix at (510) 412-2321.

ATTACHMENT: Analytical Report

USEPA REGION 9 LABORATORY
REPORT NARRATIVE

CASE NUMBER: R00S16
SAMPLE DELIVERY GROUP: 00005B
PROGRAM: SUPERFUND
DOCUMENT CONTROL #: ESTW-9B-2915
DATE: 01/27/00
ANALYSIS: PERCHLORATE AND TOTAL DISSOLVED SOLIDS
SAMPLE NUMBERS:

<u>SAMPLE ID</u>	<u>LABORATORY SAMPLE ID</u>
LVW@No. Shore Rd. Bridge	AB25844

GENERAL COMMENTS

One water sample was received from the Colorado River Study Superfund project on 12/28/99.

The requested analyses were perchlorate by Region 9 Laboratory SOP 531 and total dissolved solids by EPA Method 160.1. The sample was analyzed within the required holding times.

SAMPLE RECEIPT AND PRESERVATION

Sample LVW@No. Shore Rd. Bridge was received at a temperature of 7°C on 12/28/99. All custody seals were intact.

QA/QC SUMMARY

No analytes were detected in the blanks associated with this SDG.

The perchlorate level was greater than 4x the added LFM in QC sample LVW@No. Shore Rd. Bridge; no perchlorate LFM recovery was calculated.

The RPDs for all duplicates were less than or equal to the 20% QC limit for all analytes where the sample result was greater than or equal to 5 times the quantitation limit. For analytes where the sample result was less than 5 times the quantitation limit the difference between the duplicates was less than the quantitation limit.

All LFB recoveries were within the QC limits.

Questions concerning the data can be answered by Patrick Hirata at (510) 412-2354.

Laboratory Reagent Blanks (LRB)

A laboratory reagent blank is laboratory reagent water or baked sand with all reagents added and carried through the same sample preparation and analytical procedures as the field samples. The laboratory reagent blank is used to determine the level of contamination introduced by the laboratory during analysis.

Laboratory Fortified Matrix (LFM) and Laboratory Duplicate (LD) Analysis

The laboratory fortified matrix spike sample and laboratory duplicate analyses provide information about the effect of the sample matrix on sample preparation and measurement. Poor percent recovery (%R) results and large relative percent difference (RPD) between duplicates may indicate inconsistent laboratory technique, sample nonhomogeneity in soils, or matrix effects which may interfere with analysis.

Laboratory Fortified Blank (LFB) Analysis

The laboratory fortified blank is laboratory reagent water or baked sand with a known concentration of the analytes of interest added by the laboratory with all reagents added and carried through the same sample preparation and analytical procedures as the field samples. Poor percent recovery (%R) results may indicate inconsistent laboratory technique.

EPA REGION 9 LABORATORY-RICHMOND, CA
SUMMARY OF ANALYTICAL RESULTS

Case Number: R00S16
Site: Colorado River Study
SDG: 00005B
Date: 01/25/00

Analysis: Perchlorate and TDS
Matrix: Water

Station Location	N/A			N/A			N/A
Sample I.D.	LVW@No. Shore Rd.			Reagent			Quantitation
Lab Sample I.D.	AB25844			Blank			Limit
Date of Collection	12/27/99			N/A			N/A
Analyte	Result	Q	Com	Result	Q	Com	Result
Perchlorate (ug/L)	600			5 U			5
Total Dissolved Solids (mg/L)	1800			20 U			20

Com - Comments refer to the corresponding section in the report narrative for each letter.

N/A - Not Applicable.

N/R - Not Required.

Q - Refer to data qualifiers.

U - The parameter was analyzed for, but was not detected; The associated value is the sample detection limit, adjusted for dilution, if any.

J - The associated value is an estimated quantity.